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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,490	01/06/1999	MATTHEW DAVIS GARD	35684.0101(P)	8191

7590

10/16/2002

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EXAMINER

LANEAU, RONALD

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 10/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/227,490

Applicant(s)

GARD, MATTHEW DAVIS

Examiner

Ronald Laneau

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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***Response to Amendment***

1. The amendment filed on 7/30/02 has been entered. New claims 17-32 are added and claims 1-32 are now pending.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lefkowitz et al (4,524,348) in view of Capper et al (5,288,078).

As per claims 1, 5, 9, 13, 17, 21, 25, and 29, Lefkowitz et al teach between a physical object, such as a part of the human body, and a machine. Movement of the physical object in a defined field is sensed, and signals corresponding to such movements are received, detected, amplified and produced as an input signal to the machine to move an element of the machine in the same direction as, and in an amount proportional to, movement of the object (see abstract). Further, Lefkowitz et al teach a three-dimensional effect of the type, a control panel 38 coupled to module 8 through control module 20 by one or more conductors or cables 40 or 42 (col. 4, lines 25-33), an antenna 18 that senses and signals the movement of the hand in the defined field x-axis 26, antenna 30 senses and signals the movement of the hand in the defined field along y-axis 36, and antenna 38 senses and signals the movement of the hand in the defined field along z-axis 44 (see col. 5, lines 36-42). Lefkowitz et al do not explicitly say two or more conductors

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but having done for one or more would certainly be capable of doing it for two or more conductors as claimed. Lefkowitz et al do not teach a converter that translates the sensed movement into tree-dimensional but Capper et al teach a converter seen in figure 6C which is capable of translating movement into tree-dimensional vector data as claimed.

It would have been obvious to one of ordinary skill in the art to utilize the converter taught by Capper et al into the device of Lefkowitz et al because it would include movement along an x-axis or a y-axis, simulation of movement of such a display signal along a depth or z-axis to give the display signal a three-dimensional appearance, or any combination thereof (see col. 3, lines 9-14).

As per claims 2, 6, 10, 14, 18, 22, 26, and 30, Capper et al do not teach a converter which determines the change in voltage in the dielectric area but it would have been obvious to one of ordinary skill in the art to utilize the converter taught by Capper et al as such for the same reasons given previously.

As per claims 3, 7, 11, 15, 19, 23, 27, and 31, Capper et al do not teach a converter which determines the change in the frequency but it would have been obvious to one of ordinary skill in the art to utilize the converter taught by Capper et al as such for the same reasons given in claims 1, 5, 9, 13, 17, 21, 25, and 29.

As per claims 4, 8, 12, 16, 20, 24, 28, and 32, Capper et al do not teach a converter which provides circuitry that heterodynes said frequency with a fixed oscillator but it would have been obvious to one of ordinary skill in the art to utilize the converter taught by Capper et al as such for the same reasons given 1, 5, 9, 13, 17, 21, 25, and 29.

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4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Laneau whose telephone number is 703-305-3973. The examiner can normally be reached on Monday-Thursday from 8:00 AM to 6:00 PM or via email: ronald.laneau@uspto.gov.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached at 703-305-4709.

6. **Any response to this final action should be mailed to:**

**BOX AF**

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Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the Technology Center 2600 Customer Service Office whose telephone  
number is (703) 306-0377.

Ronald Laneau  
Examiner  
Art Unit 2674



RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

rl  
October 3, 2002